

# Governance and transition to a sustainable energy system: how institutions, rules and incentives in Great Britain support the current system and undermine change

[Catherine.mitchell@exeter.ac.uk](mailto:Catherine.mitchell@exeter.ac.uk)

Berlin, 18 September 2015



New Thinking For Energy

UNIVERSITY OF  
EXETER

EPSRC  
Engineering and Physical Sciences  
Research Council



New Thinking For Energy

## Conservative / Lib Dem Policies since 2010

- Electricity Market Reform 2010
  - Main aim to enable support for new nuclear programme  
<http://www.theguardian.com/environment/2011/mar/11/nuclear-power-reason-energy-regulations>
  - Includes a capacity payment which has supported existing gas, coal and nuclear – to some extent must make up for the non-EDF Big 6 irritation with Hinkley
  - The Legal requirements of implementing a new Energy Act have been more or less met – for example consultations etc – but Government has done what it wants to do in the face of almost complete opposition across energy system spectrum

GB Govt being taken to court over the demand side response

## **GB energy policies since May 2015 and election of the Conservative Government**

- Zero carbon homes by 2016 cancelled
- Zero carbon buildings by 2019 cancelled
- Green Deal cancelled
- Climate Change Levy exemption for zero carbon energy cancelled
- Solar support via RO cancelled
- Onshore wind via RO and CfD cancelled
- Public ownership of the Green Investment Bank (to be privatised)
- Differential Vehicle Excise Duty weakened
- Preventing Shale Gas Exploration in Protected Areas cancelled

IGov

2

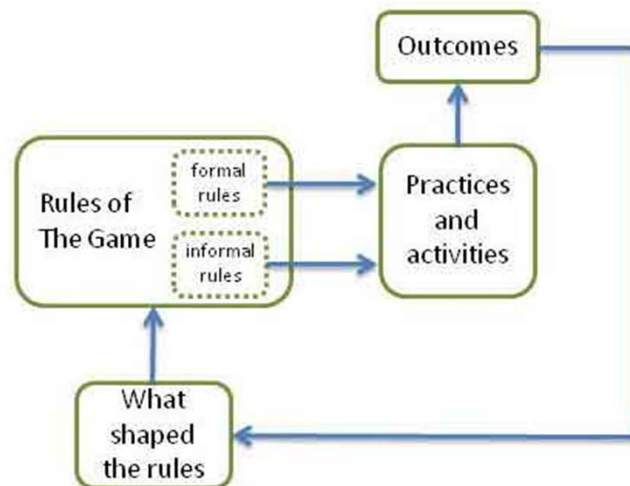
Letter Providing Overview and References -

<http://www.wildlifetrusts.org/news/2015/07/29/environmental-groups-call-pms-intervention-10-green-policies-scrapped>

## How can this have happened?

- The Manifesto said that it would ban onshore wind but none of the other policies.
- What is it about GB energy governance which enables this?
- The outcome is probably a gas future

## What is Governance ?



IGov

Governance is the rules of the game, both :

- The government rules (at whatever level ie national, regional, local); its institutions; its policies, regulations and their rules and incentives; and
- the process of setting those rules of the game – ie why are the institutions chosen/maintained as they have been; why are they set up in the way they are? Why are the policies as they are? Who agreed / fought for them and against them, and why? What is the politics of this? Both at a formal and informal level?

Governance is very important for innovation. Governance is the basis of how the market actors (whether they be businesses, individuals, households and so on) can make money; the costs of trying to do something; the complexity of trying to do something (ie the rules for access the grid; the rules to sign up to electricity market code or licenses; the requirement for collateral etc when becoming involved in a market. These rules can make a huge difference to which players become involved in the market and which are excluded, and therefore the rate of change and so the success of the transformation.

Institutions, Interests and Ideas develop in countries for all sorts of reasons, over a long period of time.

So, for example, a country may continue to have coal interests because coal has been important to its economies for a very long time – and as such, the interest of coal becomes an important political interest. These are cultural interests and often woven into governance, and difficult to

change.

See:

<http://projects.exeter.ac.uk/igov/working-paper-theorising-governance-and-innovation-in-sustainable-energy-transitions/>

<http://projects.exeter.ac.uk/igov/>

<http://projects.exeter.ac.uk/igov/working-paper-change-and-inertia-in-the-uk-energy-system/>

A proposed alternative governance system: <http://projects.exeter.ac.uk/igov/working-paper-public-value-energy-governance/>

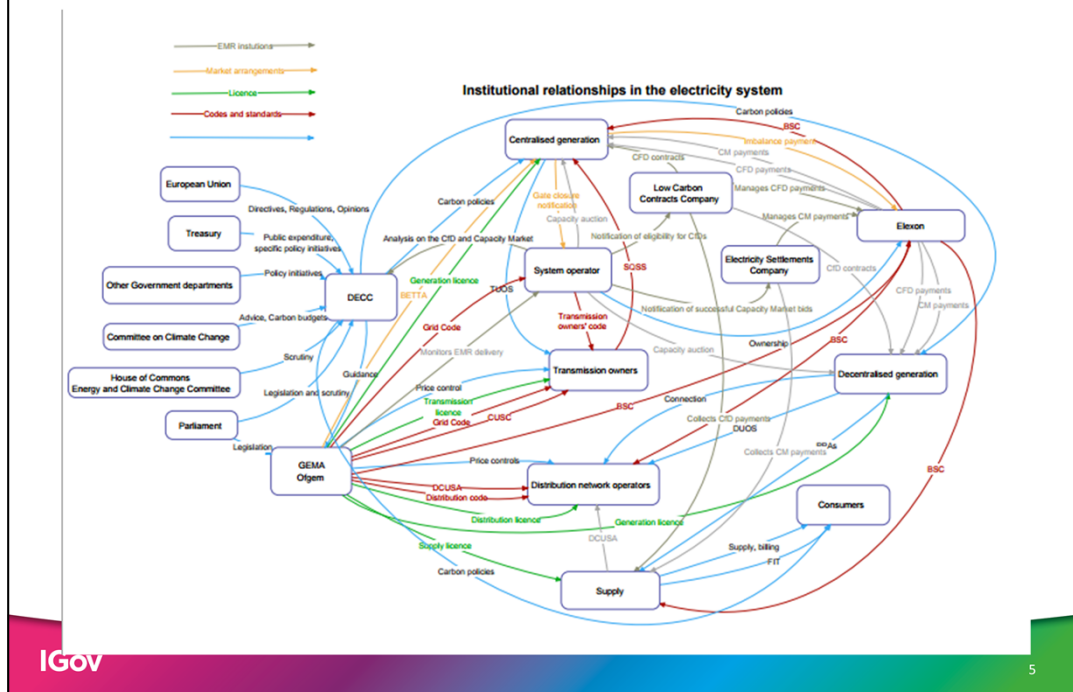
Shorter blogs on PVEG (name to change):

<http://projects.exeter.ac.uk/igov/new-thinking-bringing-international-and-local-together-decentralising-energy-regulation/>

<http://projects.exeter.ac.uk/igov/new-thinking-first-past-the-post-politics-is-a-major-barrier-in-gb-to-a-legitimate-long-term-energy-policy-framework/>

# Current GB Energy Institutions and Ideas

<http://blogs.exeter.ac.uk/energy/2014/11/12/mapping-the-power-in-the-electricity-system/>



The importance of **Institutions** - Ofgem at the centre of GB energy policy – a large organisation which was set up as an ‘independent’ economic regulator (as a result of embedded GB **ideas** about how markets are the best means of achieving outcomes for GB). This clarity has been undermined by additional responsibilities for future customers (environment) and security added on.

This leads to (1) a lack of clarity between Government and Ofgem about how decisions of societal interest should be made plus (2) **narrow** inclusion of ideas as Ofgem thinks of energy primarily in terms of competition – mainly because of its Duties although should be able to interpret more widely than it has prior to Dermot Nolan taking over; and (3) in difficult position in that has to bring in environment and security, and often used by Government to place blame – but it is, at root, DECC / Government’s responsibility to clarify – see our SPS submission <http://projects.exeter.ac.uk/igov/submission-to-decc-consultation-on-the-draft-strategy-and-policy-statement/> or the submissions to the CMA <http://projects.exeter.ac.uk/igov/submission-to-cma-energy-market-investigation-provisional-findings-possible-remedies/>

Competition and Markets Authority –GB’s highest form of competition regulator - currently Investigating the Energy Market – adds to narrowness of debate.

**Informal Rules:**

Interests / influence – interests and influence have to get to DECC, Ofgem and a lesser extent National Grid if they want rules and incentives to stay the same / change.

GB Governance system not open or transparent and therefore more able for influence to occur



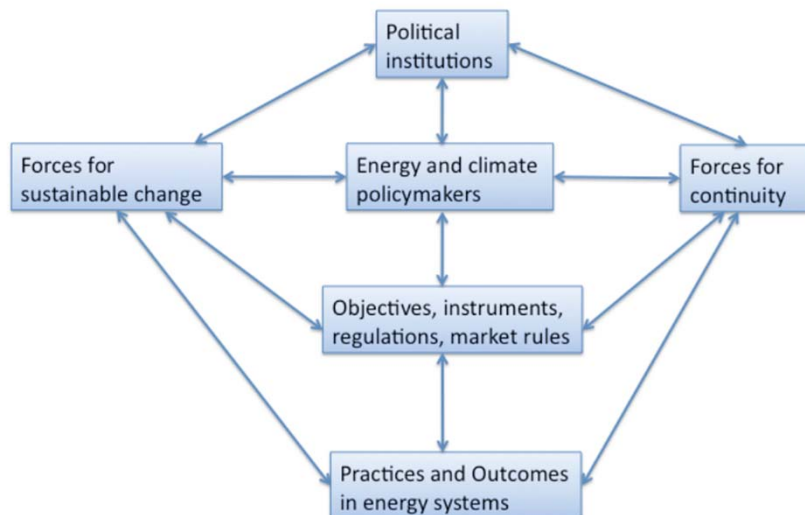
## The formal rules - how easy is it for new entrants to access / make money / survive in GB energy system?

- <http://projects.exeter.ac.uk/igov/working-paper-change-and-inertia-in-the-uk-energy-system/>
- In general,
  - The energy system rules benefit the few (de facto the incumbents) rather than giving access to everyone (ie difference between RO and FIT)
  - 'So called' technology and fuel neutral / blind rules which benefit the cheapest
- Market rules support the current system
  - A bilateral market with penal balancing rules
  - A market wide capacity mechanism, minimal DSR
  - Poor liquidity of trading, more difficult for variable energy
- Retail market liquidity issues – most customers don't switch (CMA says 17% profit for electricity suppliers and standard variable tariff)
- Vertical Integration of Big 6 – powerful structure in favour of supply; maintains affordability problems; and means that 'price' / transparency is poor
- Code and License Governance – not fit for purpose - difficult to make change
- Supplier hub model - does not recognise embedded benefits so DG is not paid their value
- Powerful triangle of Government, Independent Regulator and Privatised Grid

IGov



## So what shaped the rules of the game in GB, and what does it mean for transformation?



IGov

7

From Caroline Kuzemko et al, 2015, submitted as a journal article and as presentation  
<http://projects.exeter.ac.uk/igov/presentation-the-political-economy-of-sustainable-energy-transitions/>

Political institutions include rules of voting – PR; FPTP; federalism etc

Forces for sustainable change VERSUS forces for continuity – can change depending on external forces so for example, in GB – E.on / RWE are changing their roles somewhat from absolutely being for continuity to something else because of the situation in Germany

There can also be very gradual change – so GB does have some mentors for RE even though just recently RE support is effectively at an end in GB – this is not enough support to maintain policy support but it has still changed the overall force for sustainable change v continuity to a degree

Natural resources of a country develop actor groups – which can create momentum / inertia for change ie coal and Germany; oil and Norway etc

History also has powerful momentum / inertia ie in GB privatisation and reasons why Big 6 developed

ML et al paper concludes there are 2 reasons that determine how open energy systems

are likely to be to sustainable transformation

- how far decision-makers are committed to change relating to the macro political relationships between policy makers and energy users;
  - ❖ is there a strong elite consensus
  - ❖ Are there supportive electoral conditions
  - ❖ Are the business lobbies in support of transformation stronger than those which want continuity
- how far decision-makers have the capacity to bring about change
  - ❖ Does the political paradigm give value to environmental problems
  - ❖ Do policy makers have good access to info and a strong technical and analytical capacity
  - ❖ Are the vested interests weak?

**proposed solution** <http://projects.exeter.ac.uk/igov/working-paper-public-value-energy-governance/>



IGov has put forward a straw idea for discussion about how the governance system in the UK has to change

# Annex

## The best thing about GB Energy Policy

- The best thing in GB energy [so far – has to be question market now given recent policy changes] is that 10% of our electricity supply comes from new entrant suppliers
  - see Ofgem non-traditional business model paper (<https://www.ofgem.gov.uk/publications-and-updates/non-traditional-business-models-supporting-transformative-change-energy-market>)
  - For new entrant suppliers see <https://www.ofgem.gov.uk/monitoring-market/overview>

IGov

Regulator in theory an economic regulator but also has to take account of customers and future customers – which is where environment and affordability concerns come in so very unclear how they do that.

Ofgem does want to enable competition in retail market and does recognise the social innovation – will be interested